	ARMY RDT&E BUDGET ITEM J	USTIFI	CATIO	N (R-2	Exhibi	it)	Fe	ebruary 2	002	
	FACTIVITY monstration/validation	(E NUMBER)603308A (Dem/Val)	- Army N		fense Sys	tems Inte	gration		
	COST (In Thousands)	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to	Total Cost
	COST (III Filousailus)	Actual	Estimate	Estimate	Estimate	Estimate	Estimate	Estimate	Complete	
	Total Program Element (PE) Cost	93808	70021	7417	1472	1463	452	439	0	226463
978	SPACE CONTROL	2972	996	1001	999	996	0	0	0	6964
989	MOBILE TACTICAL HIGH ENERGY LASER (MTHEL)	14420	12905	0	0	0	0	0	0	51252
990	SPACE AND MISSILE DEFENSE INTEGRATION	56913	41419	516	473	467	452	439	0	92663
997	SPACE AND MISSILE DEFENSE BATTLELAB	19503	13118	0	0	0	0	0	0	68101
99A	ARMY AIR AND MISSILE DEFENSE	0	1583	5900	0	0	0	0	0	7483

A. Mission Description and Budget Item Justification: This program element funds missile defense systems integration efforts for both the Army Space and Missile Defense Command (SMDC) and the Program Executive Office for Air and Missile Defense (PEO-AMD).

SMDC: HQDA General Order No. 5, 1 March 1998, designated the US Army Space and Missile Defense Command (USASMDC) the specified proponent for space and National Missile Defense (NMD), and the operational integrator for Theater Missile Defense (TMD). In response to this designation, the Missile Defense Battle Integration Center (MDBIC) and other existing USASMDC elements were reorganized and merged to form the Space and Missile Defense Battle Lab (SMDBL). The SMDBL is chartered to develop warfighting concepts, focus military science and technology research, and conduct warfighting experiments. The reorganization also created the Force Development and Integration Center (FDIC), a major support element of USASMDC. This program element funds the FDIC, created to execute the specified proponency role of the USASMDC. The FDIC develops space and NMD solutions to Doctrine, Training, Leader Development, Organization, Materiel, and Soldiers (DTLOMS) and executes their implementation. This program element funds the production of requirements for hardware and software solutions, the interfaces with technology development, and the development of operational and system architectures for space, NMD and TMD. In addition, this program element funds analysis and experimentation by integrating the pillars of TMD (active defense, passive defense, attack operations, and battle management/command, control, communications, computers, and intelligence functions) and inputting Army TMD requirements into Joint forums. This program also supports Aviation and Artillery attack operation systems and passive missile defense materiel solutions. It also supports the Technical and Integration of the Army's Single Integrated Air Picture (SIAP).

PEO-AMD: The mission of the United States Army Program Executive Office for Air and Missile Defense (PEO AMD) is to develop, acquire, and field Theater Air and Missile Defense (TAMD) systems. These systems provide the capabilities needed to defend friendly forces and assets against attack by enemy aircraft, cruise missiles, and theater ballistic missiles (TBMs).

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)

February 2002

BUDGET ACTIVITY

4 - Demonstration/validation

PE NUMBER AND TITLE

0603308A - Army Missile Defense Systems Integration

(Dem/Val)

The Army is developing and procuring individual TAMD weapon systems that will be integrated to form a Family of Systems (FoS). It is the PEO's responsibility to ensure the Army TAMD FoS is developed as an integrated capability. The PEO will integrate Army and Joint requirements in order to satisfy both needs. The PEO supports interoperability systems engineering, simulation, analysis, and evaluation in order to integrate the Family of Systems. Funding will allow the PEO to address both Army and Joint interoperability requirements, ensuring an effective Army TAMD FoS.

This program supports the Legacy to Objective transition path of the Transformation Campaign Plan.

Funding for projects 989, 990, 997 and 99A transferred to PE 0603305A beginning in FY03. Project 978, Space Control, is designated as a DOD Space Program.

FY 2001	FY 2002	FY 2003
96380	19491	22321
97273	71191	0
	0	0
	-1170	0
-2572	0	0
	0	0
	0	0
-893	0	0
	0	-14904
93808	70021	7417
	96380 97273 -2572 -893	96380 19491 97273 71191 0 -1170 -2572 0 0 -893 0

Change Summary Explanation:

FY02 increases due to various Congressional adds to the President's Budget (\$51.7M). FY03 decrease due to re-alignments to meet critical Army priorities and transfers to PE 603305A.

ARMY RDT&E BUDGET ITEM JU	STIFI	CATIO	N (R-2	A Exhi	bit)	Fe	bruary 2	002	
BUDGET ACTIVITY 4 - Demonstration/validation		ENUMBER 0603308A Integration	- Army N	Aissile De	fense Sys	tems		PROJECT 978	
COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
978 SPACE CONTROL	2972	996	1001	999	996	0	0	0	6964

A. Mission Description and Budget Item Justification: Space control supports the Legacy to Objective transition path of the Army Transformation Campaign Plan (TCP) by providing funding that will help meet current Army Requirements Review Committee guidance, DEPSECDEF directives and Army Space Negation and Surveillance ORD requirements. Space Control has gained much importance with the increase in foreign government, consortium, and commercial space-based assets. Adversaries will have the capability to capitalize on these assets to identify friendly activities and operations, increase their lethality and intelligence gathering efforts, and thus reduce our survivability, agility, versatility and information superiority. Space Control is a Theater and Corps system designed to provide the following: 1) Advanced Space Surveillance, which will characterize adversary space-based assets, identify their capabilities, and provide information relating to their intentions and how they can influence our operations; 2) Army Space Control Negation Technologies, which will deny and disrupt adversary imaging capabilities at varying ranges and altitudes; and 3) Decision Support System to plan, coordinate, execute and assess space control operations and provide battlespace management for unique space control mission requirements. With the requirements established by the Transformation Campaign Plan, space control is critical to the Objective Force for survivability in that it denies adversary imaging for precision targeting, thus reducing lethality, and limiting intelligence gathering. Space Control also supports the Objective Force characteristics of agility and versatility by denying adversary space-based information superiority and total situational awareness of the total battlespace picture.

FY 2001 Accomplishments:

• 2972 Continued development of the Kinetic Energy Anti-Satellite kill vehicles.

Total 2972

ARMY RDT&E BUDGET ITEM JUSTIF	ICATION (R-2A Exhibit)	February 2002
BUDGET ACTIVITY 4 - Demonstration/validation	PE NUMBER AND TITLE 0603308A - Army Missile Defense Systo Integration (Dem/Val)	PROJECT 978
FY 2002 Planned Program • 996 Define Space Control Architectural requirements in support of Analysis of Alternatives (AoA) process. Total 996	the Objective Force and the Transformation Campa	ign Plan. Participate in the space control
FY 2003 Planned Program • 1001 Perform analysis for potential application to the Future Combat requirements.	t System (FCS). Continue architectural definitions.	Identify core battle management
Total 1001		
B. Other Program Funding Summary: Not applicable for this item.		
C. Acquisition Strategy: Not applicable for this item.		
D. Schedule Profile: Not applicable for this item.		

I. Product Development Performing Activity & Total Method & Type Pys Cost	BUDGET ACTIVITY 4 - Demonstration/v		Y RDT&E CO	OST AN	PE 1 06	SIS(K-3 ₂ NUMBER AND 03308A - A em/Val)	D TITLE	sile Defen	se Syste		ruary 200 ation	PROJEC 978	Т
II. Support Cost Contract Method & Location Prys Cost Cost Award Date	I. Product Development	Method &	Performing Activity & Location	Total PYs Cost		t Award		Award		Award			Targe Value of Contrac
II. Support Cost Contract Method & Location Type Cost Method & Location Date Cost Method & Location FY 2001 FY 2002 FY 2003 FY 2003 Award Cost Date Cost Da	Subtotal:			0	C)	0		0		0	0	(
Method & Type			•				·						
Subtotal: Contract Method & Location Performing Activity & Total PYs Cost Pys Cost Cost Award Cost Cos	II. Support Cost	Method &		Total PYs Cost		t Award		Award		Award			Targe Value of Contrac
Subtotal: Subtot	a . Various			0	2972		996		1001		0	4969	(
III. Test and Evaluation Contract Performing Activity & Total PYs Cost Cost Award Cost Award Cost Award Cost Cost Award Cost Cost Cost Cost Cost Cost Cost Cost	Subtotal			0	2972		996		1001		0	4969	(
Method & Location PYs Cost Cost Award Cost Award Cost Award Cost Award Complete Cost													
Type Date Date Date	III. Test and Evaluation												Targe Value o Contrac
Subtotal:	Subtotal:			0	C)	0		0		0	0	(

	ARM	IY RDT&E CO	ST AN	IALYS:	IS(R-3))			Febi	ruary 200	2	
BUDGET ACTIVITY 4 - Demonstration/v	alidation			0603	јмвек ANI 3308A <i>- A</i> m/Val)	O TITLE Army Miss	sile Defen	se Syster	ns Integr	ation	PROJEC 978	Т
V. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
Subtotal:			0	0		0		0		0	0	
Project Total Cost:			0	2972		996		1001		0	4969	

ARMY RDT&E BUDGET ITEM JU	STIFI	CATIO	N (R-2	A Exhi	bit)	Fe	ebruary 2	002	
BUDGET ACTIVITY 4 - Demonstration/validation		PE NUMBER 0603308A Integratio	- Army N	Aissile De	efense Sys	tems		PROJECT 99A	
COST (In Thousands)	FY 2001 Actual	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
99A ARMY AIR AND MISSILE DEFENSE	(0 1583	5900	0	0	0	0	0	7483

A. Mission Description and Budget Item Justification: This funding supports both the JDEP and the SIAP efforts withing the Army. The Joint Distributed Engineering Plant (JDEP) is a Navy proposed concept expanding their land-based Distributed Plant which assesses integration and interoperability problems (air and missile defense) of the fleet. This program will be used to evaluate interoperability of joint forces, test and evaluate interoperability of new acquisition systems, and engineer hardware and software to correct deficiencies and develop new capabilities. The initial focus of this program is directed toward Integrated Air Defense. The program consists of individual combat systems distributed throughout the US connected with ATM/T1 telecommunication network(s) and distributed interactive simulation (DIS) protocols. The JDEP management structure consists of service execution cells. This funding provides for the Army involvement in the overall JDEP program. This effort supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

The Single Integrated Air Picture (SIAP) program will provide track quality data and fused sensor data to weapon platforms to identify and engage threat systems. The Army was directed, by the JROC, to fund infrastructure costs associated with SIAP. This funding will be used to manage and coordinate all of the Army's SIAP activities with numerous Army stakeholders. It will also allow the Army to provide Army solutions to SIAP-related tasks.

FY 2001 Accomplishments:

No funding received in FY01

FY 2002 Planned Program

- 931 JDEP Test Event Participation.
- Communications Support: T1 Lease, ATM KG routers purchase and maintenance, Tactical Digital Information Link (TADIL) emulation and voice.
- Operational Center Support: Provides support during JDEP testing and pre-event simulations.

Total 1583

	ET ACTIV e monst i	VITY ration/validation	PE NUMBER AND TITLE 0603308A - Army Missile Defense Systems Integration (Dem/Val)	РРОЈЕСТ 99А
FY 200	03 Plann	ed Program		
•	775	Program Management Support. Provides for Army overall m	anagement of SIAP program .	
•	1875	Systems Engineering. Provides funding for Functional and A	llocated baselines within Army systems.	
•	600	Modeling and Simulation Support. Provides for capability to	model and simulate Army systems.	
•	700	Test and Evaluation. Provides funding for live test support an	nd analysis of various Army test activities.	
•	1200	Interoperability assessment. Provides support for Lessons Le roadmap.	arned Database, root cause analysis, capabilities and limitions of	of systems and interoperabilit
•	750	Block Upgrades. Provides funding for the an Acquisition Roa	dmap, Incremental Block Design options, life cycle costs estim	ates and block fielding plans
Total <u>B. Oth</u>	5900 er Progr	ram Funding Summary: Not applicable for this item.		
<u>C. Acc</u>	<u>quisition</u>	Strategy: Not applicable for this item.		

	ARM	Y RDT&E CO	ST AN	IALYS	IS(R-3))			Febr	ruary 200	2	
BUDGET ACTIVITY 4 - Demonstration/va	alidation			060	umber ani 3308A - <i>A</i> m/Val)	OTITLE Army Miss	sile Defen	se Syster	ns Integra	ation	PROJEC 99A	Т
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Targe Value of Contrac
a . Contractor Support	Various	Various	0	0		0		4425		0	4425	(
Subtotal:			0	0		0		4425		0	4425	(
Remarks: Not applicable												
				EV. 2001								
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Value of
II. Support Cost a . Gov't Support, contractor support and communications support	Method & Type				Award		Award		Award			Targe Value of Contrac

	AKW	Y RDT&E CO	<u> </u>	ALY)15(K-3)				Febi	ruary 200	2	
BUDGET ACTIVITY 4 - Demonstration/ν ε	lidation			06	iumber ani)3308A - A e m/Val)		sile Defer	se Systei	ns Integr	ation	PROJEC 99A	Т
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cos	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Targe Value o Contrac
a . Gov	1095, MIPR	Varioius Army Agencies	0	O		883		700		Continue	1583	
Subtotal:			0	C		883		700		Continue	1583	(
Remarks: JDEP testing will b	e conducted bet	ween various Army agencie	es through th	ne use of T1	links. Variou	s Army agend	cies will be in	volved in di	fferent phase	es of testing.		
	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2001 Cos	FY 2001 Award	FY 2002 Cost	FY 2002 Award	FY 2003 Cost	FY 2003 Award	Cost To	Total Cost	Targe Value o
Remarks: JDEP testing will b IV. Management Services	Contract	Performing Activity &	Total	FY 2001	FY 2001 Award Date	FY 2002	FY 2002	FY 2003	FY 2003	Cost To		Value o Contrac
Remarks: JDEP testing will b	Contract Method &	Performing Activity &	Total PYs Cost	FY 2001 Cos	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award	FY 2003 Cost	FY 2003 Award	Cost To Complete	Cost	